

## ABSTRACT OF THE DISCLOSURE

### Method and System for Feedback Control of Optical Fiber Lens Fusing

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A method and system for fusing an optical fiber lens is compatible with automation. Specifically, the fusing of the fiber lens is controlled in response to a diffraction pattern of light exiting from the fiber lens. This diffraction pattern is indicative of the lens shape and characteristics. Specifically, light is injected into an optical fiber and a diffraction pattern of the light exiting from a fiber lens is detected. The fiber lens is then fused in response to this diffraction pattern.

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